AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings:

1. (currently amended): A method for producing a vaso-occlusive element for use in occluding a vessel, the method comprising the step of injection molding an absorbable polymeric material into a three-dimensional configuration, wherein the three-dimensional configuration self-forms upon deployment or where the three-dimensional configuration does not change upon deployment into the vessel.

2. (canceled).

3. (previously presented): The method of claim 1, wherein the absorbable material is selected from the group consisting of polyglycolide, poly-L-lactide, poly(g-ethyl glutamates, polyphosphazene, polysaccharides, polyorthoesters, polycaprolactone, polyhydroxybutyrate, polydioxanone, polycarbonates, polyanhydrides, copolymers or blends thereof, collagen, elastin, fibrinogen, fibronectin, vitronectin, laminin, gelatin and combinations thereof.

4. (original): The method of claim 1, wherein the three-dimensional configuration comprises a cylindrical configuration having a longitudinal axis.

5. (original): The method of claim 4, wherein the cylindrical configuration further includes a plurality of channels therein.

6. (original): The method of claim 5, wherein the channels are perpendicular to the longitudinal axis of the device.

7. (original): The method of claim 1, wherein the three-dimensional configuration comprises a plurality of shaped structures linked in series.

8. (original): The method of claim 7, wherein the shaped elements are ovoid.

9. (original): The method of claim 7, wherein the shaped elements are spherical.

10. (original): The method of claim 7, wherein the shaped elements are conical or pyramidal.

11. (original): The method of claim 7, wherein the three-dimensional configuration is a single-molded element.

12. (original): The method of claim 7, wherein the three-dimensional configuration is formed from two or more separate elements.

13. (previously presented): The method of claim 7, wherein the separate elements are linked by a polymeric wire or a ductile metallic wire.

14. (original): The method of claim 1, further comprising the step of providing one or more severable junctions detachably connected to a pusher element.

15. (original): The method of claim 14, wherein the severable junction comprises an electrolytically detachable assembly adapted to detach by imposition of a current on said pusher element.

16. (original): The method of claim 14, wherein the severable junction comprises a mechanically detachable assembly adapted to detach by movement or pressure imposed on or within said pusher element.

17. (original): The method of claim 14, wherein the severable junction comprises a thermally detachable assembly adapted to detach by localized delivery of heat to said junction.

18. (original): The method of claim 14, wherein the severable junction comprises a radiation detachable assembly adapted to detach by delivery of electromagnetic radiation to said junction.

19. (original): The method of claim 1, further comprising micro-machining the injection-molded element.

20. (original): The method of claim 1, further comprising chemically etching the injection-molded element.

21. (original): The method of claim 1, further comprising laser cutting the injection-molded element.

22. (original): The method of claim 1, further comprising linking a plurality of the injection-molded elements.

23. (original): The method of claim 22, wherein the linking is by a method selected from the group consisting of soldering, interference fitting, friction fitting, stringing, ultrasonic welding, thermal welding and solvent bonding.

24. (original): The method of claim 1, further comprising the step of blending one or more radio-opaque materials with the polymer.

25. (original): The method of claim 1, wherein the injection molding comprises insert molding a metallic wire within the three-dimensional configuration.

26. (original): A vaso-occlusive device produced by the method of claim 1.

27. (previously presented): A vaso-occlusive device comprising at least one polymeric material, wherein said device is formed into a three-dimensional configuration and is adapted to be deployed into a body cavity in the three-dimensional configuration.

28. (original): The vaso-occlusive device of claim 27, wherein the vaso-occlusive device comprises at least one absorbable or biodegradable polymer.

29. (original): The device of claim 28, wherein the absorbable material is selected from the group consisting of polyglycolide, poly-L-lactide, poly(g-ethyl glutamates, polyphosphazene, polysaccharides, polyorthoesters, polycaprolactone, polyhydroxybutyrate, polydioxanone, polycarbonates, polyanhydrides, copolymers or blends thereof, collagen, elastin, fibrinogen, fibronectin, vitronectin, laminin, gelatin and combinations thereof..

30. (original): The device of claim 27, wherein the three-dimensional configuration comprises a cylindrical configuration having a longitudinal axis.

31. (original): The device of claim 30, wherein the cylindrical configuration further includes a plurality of channels therein.

32. (original): The device of claim 31, wherein the channels are perpendicular to the longitudinal axis of the device.

33. (original): The device of claim 27, wherein the three-dimensional configuration comprises a plurality of shaped structures linked in series.

34. (original): The device of claim 33, wherein the shaped elements are ovoid.

35. (original): The device of claim 33, wherein the shaped elements are spherical.

36. (original): The device of claim 33, wherein the shaped elements are conical or pyramidal.

37. (original): The device of claim 33, wherein the three-dimensional configuration is a single-molded element.

38. (original): The device of claim 33, wherein the three-dimensional configuration is formed from two or more separate elements.

39. (previously presented): The device of claim 33, wherein the separate elements are linked by a polymeric wire or a ductile metallic wire.

40. (original): The device of claim 27, further comprising the step of providing severable junction detachably connected to a pusher element.

41. (original): The device of claim 40, wherein the severable junction comprises an electrolytically detachable assembly adapted to detach by imposition of a current on said pusher element.

42. (original): The device of claim 40, wherein the severable junction comprises a mechanically detachable assembly adapted to detach by movement or pressure imposed on or within said pusher element.

43. (original): The device of claim 40, wherein the severable junction comprises a thermally detachable assembly adapted to detach by localized delivery of heat to said junction.

44. (original): The device of claim 40, wherein the severable junction comprises a radiation detachable assembly adapted to detach by delivery of electromagnetic radiation to said junction.

45. (original): The device of claim 27, further comprising a radio-opaque material.

46. (original): The device of claim 45, where the radio-opaque material is selected from the group consisting of tantalum, tantalum oxide, tungsten, bismuth oxide, barium sulfate, platinum, and gold.

47. (original): The device of claim 27, further comprising a bioactive material.

48. (original): The device of claim 27, produced by injection molding.

49. (original): The device of claim 48, wherein the device is micro-machined.